

Abstract

The resist according to the present invention includes any one of tetrachloromethyl tetramethoxycalix [4] arene and trichloromethyl
5 tetramethoxycalix [4] arene. The resist including such kind of components is soluble in the solvent having less effect to worsen a working environment, namely, ethyl lactate (EL), propylene glycol monomethyl ether (PGME), propylene glycol monomethyl ether acetate
10 (PGMEA), ethyl propionate, n-butyl acetate and 2-heptanone. It can be developed by tetra-methyl ammonium hydroxide in addition to the above mentioned solvent. By exposing this resist by electronic ray, high resolution of 8 nm is attained, and by using this
15 resist as a mask, various materials can be formed into a hyperfine shape. According to such kind of resist, a photosensitive resist material which has high resolution and solvable to solvents having less effect to worsen the working environment and can be developed
20 by the solvents, a exposure method using it, and a hyperfine processing method using it are provided.